

ABSTRACT

The present invention relates to nucleotide sequences of vertebrate *Delta* genes, and amino acid sequences of their encoded proteins, as well as derivatives (e.g., 5 fragments) and analogs thereof. In a specific embodiment, the vertebrate *Delta* protein is a human protein. The invention further relates to fragments (and derivatives and analogs thereof) of *Delta* which comprise one or more domains of the *Delta* protein, including but not limited to the 10 intracellular domain, extracellular domain, DSL domain, domain amino-terminal to the DSL domain, transmembrane region, or one or more EGF-like repeats of a *Delta* protein, or any combination of the foregoing. Antibodies to *Delta*, its derivatives and analogs, are additionally provided.

15 Methods of production of the *Delta* proteins, derivatives and analogs, e.g., by recombinant means, are also provided. Therapeutic and diagnostic methods and pharmaceutical compositions are provided. In specific examples, isolated *Delta* genes, from *Xenopus*, chick, mouse, and human, are 20 provided.

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